Session Two

Last session we entered the world of the Trees, Plants, Flowers and Wildlife around us. This week we are going to look in more depth at:

Trees

Location: Plantation, Park or Glen

What you need:

- Print the booklet OR use some scrap paper
- Download an identification app or use our handy Tree ID sheet
- Sticks or twigs, or lollypop sticks & string

Aims:

- Be able to identify parts of a tree
- Be able to identify different types of trees
- Connect to the trees around you

What we will cover:

- Parts of a Tree
- Different Types of Trees
- The life of a Tree

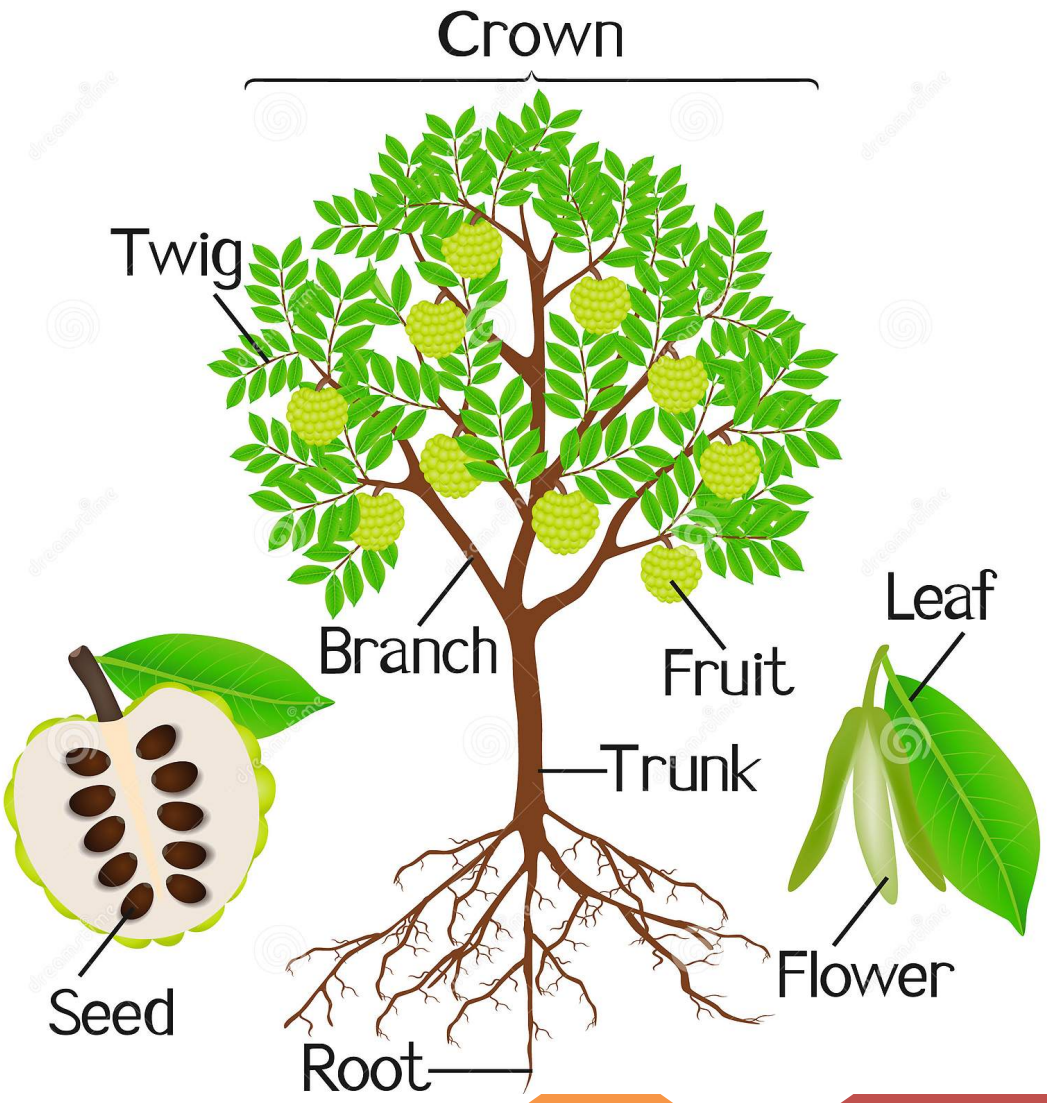
Ranger Work:

- Tree Hunt/ID
- Getting to know a Tree

Trees Information Sheet

Knowing the parts of a tree and being able to look at these can help us to find out what type of tree it is.

Parts of the Tree:
Look at the trees around you and see how many of the different parts you can see.



Don't worry if you don't see all the parts, some will only be there at certain times of the year and others are below ground, but we know they are there.

Identification of Trees:

There are lots of different trees on the Isle of Man. Some of these are what we call "native trees", such as Hazel, Rowan and Scots Pine and others have been introduced to the Island for agricultural or ornamental reasons, such as Larch, Eucalyptus and Monkey Puzzle.

Monkey Puzzle Tree

Hazel Leaves

To help us identify trees we can look at the leaves, flowers, fruit and bark. Where the tree is and its shape will also give clues as to what type of tree it is.

Scots Pine Fruit

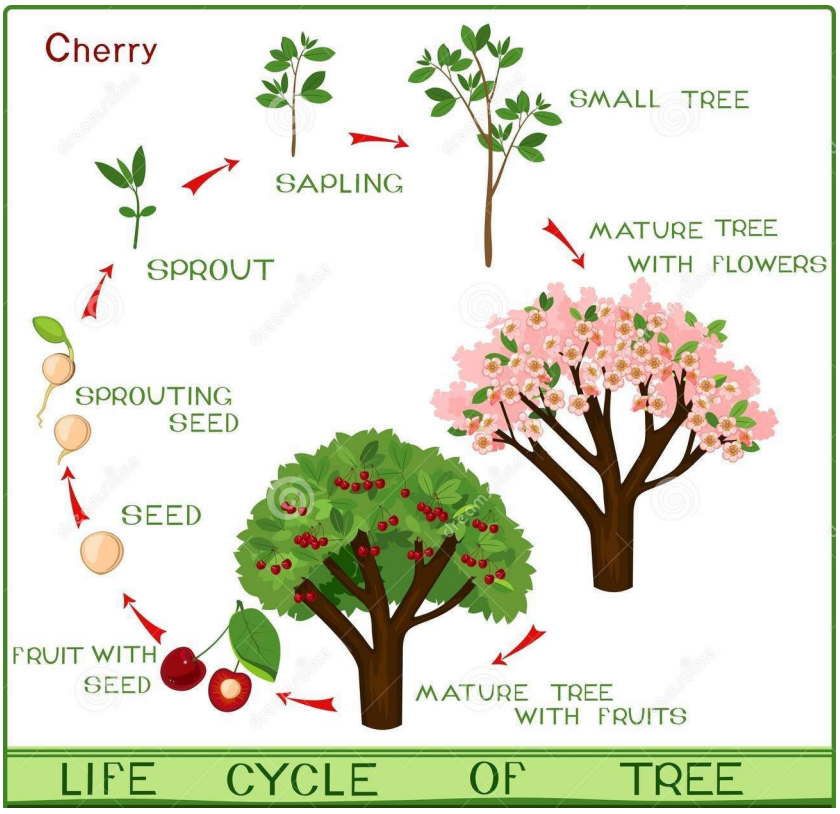
If you have access to a smartphone or tablet you can download an app to help you to identify trees. A few good (free!) ones to take a look at are: "Seek" by iNaturalist, "Picture This: Identify Plant, Flower, Weed and More", or The Woodland Trust Tree ID App.

Why not take a walk and see how many different trees you can ID. Keep a record of what you find.

Use an app or our chart provided to help you. See how many you can find.

Identification of Trees:

The Life of a Tree



Throughout a tree's life it performs a number of jobs which benefit us. Trees consume a lot of water and 'breath' in Carbon dioxide, which they store, and 'breath' out Oxygen, which we need to live.

Trees can help:

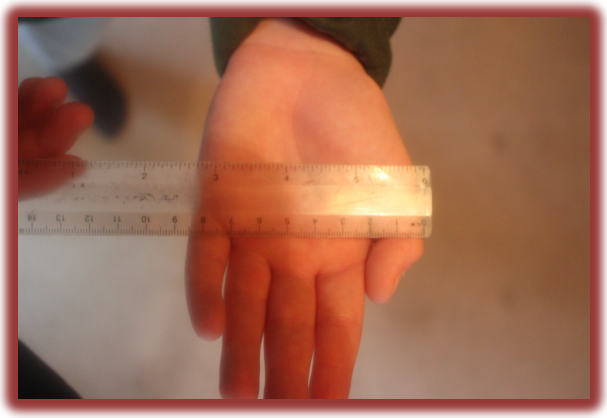
- Prevent Flooding
- Reduce water and air pollution
- Keep soil nutrient-rich
- Reduce city temperatures

They also provide shade, food and shelter for us and many other creatures. We'll learn more about this when we look at Habitats and Foraging in coming weeks.

Getting to know a Tree

Find a tree that you like. Now let's get to know your tree...

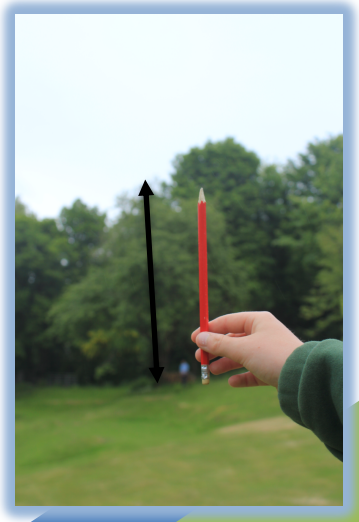
Estimating the Age of your Tree



The approximate age of some trees can be estimated by measuring the distance around the trunk of the tree at around 1m off the ground. Measure how wide your hand is if it is 75mm then this is a value of 3 years of a tree's life (i.e. 25mm = 1 year).

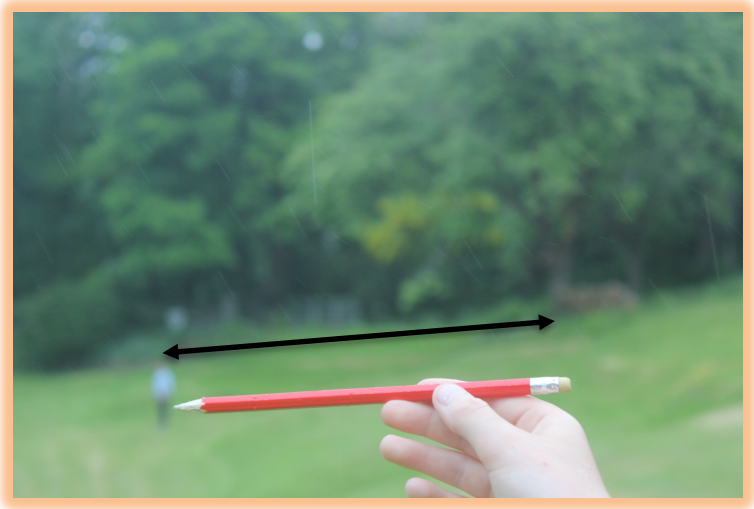
Place your hand on the tree at the 1m mark and count how many hands it takes to go all the way round. If it took 10 hands to go all the way round then times this by 3; your tree is approximately 30 years old. This method is not accurate for all trees. If your tree is a broad leaf tree, use 20mm per year. Each hand is 4 years approximately.

Estimating the Height of a Tree



You will need to walk away from your tree, how far will depend on the height of the tree, for a large tree expect to stand at least 50m or further away for this bit.

Hold a small stick or pencil out in front of you and close one eye. Measure the stick vertically to the tree. You are trying to get the bottom of your pencil at the base of the tree and the top of the pencil to the top of the tree.



Don't move your position, turn the stick horizontally keeping the base of your pencil at the base of the tree. Ask your friend or sibling to walk sideways from the base of the tree, until they are in line with the end of your pencil in the distance. If you have a measuring tape you can measure how far this is. If not, count how many steps it was from the tree to where your friend was standing when they got to the end of the pencil. You could then see how many steps high you are, let's say you are 2 steps high and your friend took 20 steps away from the tree. This means the tree is 10 times your height, this is approximately how high the tree is.

Estimating the Tree's Canopy

Pick some sticks up from the ground under your tree, if there aren't many you could use lollypop sticks. Imagine the tree is the centre of a clock face; at 12:00 look up into the tree and walk outwards to where the leaves and branches stop. Place a stick in the ground, now do the same at 6:00, 3:00, and 9:00 in the same way as you did at 12:00. Then place sticks halfway between each of those four sticks, and same again until you have around 16 sticks marking the canopy. Now lie sticks down between each point to create a large circle, or join your sticks with string, then you can pace out your tree's canopy circumference. This will be approximately the same size as the main root ball for your tree, which is why narrow trees are more prone to falling over.

Our tree

Type of Tree	Age	Height	Canopy Circumference
Cherry	92 years old	15m	68m

Now you are getting to know your tree, can you give it a name that best represents it in its environment? We called ours "Air-heart". Although there are lots of trees around it, it stands on its own so has lots of air around it but is at the heart of the other trees.

How old is your tree?
If it could talk to you about what it has seen in history, what could it tell you? Make a time line for your tree's life, include when you were born and others in your family. Has it seen any war-time; if so which one? Was it around in the Victorian time or earlier? What developments in technology have happened during your tree's life?

Air-heart (our tree) soaked in her first rays of sun light back in 1928. That year she was able to see **Amelia Earhart** be the first woman to fly across the Atlantic ocean, **Alexander Fleming**, a Scottish scientist, discover Penicillin, and most importantly, she was able to watch the film "Steamboat Willie", staring (for the first time on the big screen) **Mickey Mouse**!

Connect to your tree.
Spend time with your tree. Now you know much more about your tree, lie down underneath it and place your palms face down - like the roots of the tree. Looking up into the canopy think how the energy of the sun comes down through the leaves, into the branches, and then to the larger branches, into the bows, and then the main trunk. Now follow that energy down the trunk and into the ground. Close your eyes and think how that energy travels down into the roots and into your fingers and toes. Imagine this slowly travelling through your arms and legs, and into your main core. You and your tree are now connected as one. Think about your tree's life and how you both can work together in the world. ☺

Next week we'll be learning more about:
Wildlife